

# SECTION **RSU**

## REAR SUSPENSION

A  
B  
C  
D

### CONTENTS

RSU

<b>PRECAUTION</b> .....	2	Inspection .....	11	F
<b>PRECAUTIONS</b> .....	2	Disposal .....	12	
Precautions for Removing Battery Terminal .....	2	<b>REAR SUSPENSION ARM</b> .....	13	G
Precautions for Suspension .....	3	Exploded View .....	13	
<b>PREPARATION</b> .....	4	Removal and Installation .....	13	
<b>PREPARATION</b> .....	4	Inspection .....	14	H
Commercial Service Tools .....	4	<b>LOWER LINK</b> .....	15	
<b>SYMPTOM DIAGNOSIS</b> .....	5	Exploded View .....	15	
<b>NOISE, VIBRATION AND HARSHNESS</b>		Removal and Installation .....	15	I
<b>(NVH) TROUBLESHOOTING</b> .....	5	Inspection .....	15	
NVH Troubleshooting Chart .....	5	<b>UPPER LINK</b> .....	17	J
<b>PERIODIC MAINTENANCE</b> .....	6	Exploded View .....	17	
<b>REAR SUSPENSION ASSEMBLY</b> .....	6	Removal and Installation .....	17	
Inspection .....	6	Inspection .....	17	K
<b>WHEEL ALIGNMENT</b> .....	7	<b>REAR STABILIZER</b> .....	19	
Inspection .....	7	Exploded View .....	19	
Adjustment .....	8	Removal and Installation .....	19	L
<b>REMOVAL AND INSTALLATION</b> .....	9	Inspection .....	19	
<b>COIL SPRING</b> .....	9	<b>REAR SUSPENSION MEMBER</b> .....	20	M
Exploded View .....	9	Exploded View .....	20	
Removal and Installation .....	9	Removal and Installation .....	20	
Inspection .....	10	Inspection .....	21	N
<b>REAR SHOCK ABSORBER</b> .....	11	<b>SERVICE DATA AND SPECIFICATIONS</b>		
Exploded View .....	11	<b>(SDS)</b> .....	22	O
Removal and Installation .....	11	<b>SERVICE DATA AND SPECIFICATIONS</b>		
		<b>(SDS)</b> .....	22	P
		Wheel Alignment .....	22	
		Wheelarch Height .....	22	

# PRECAUTIONS

< PRECAUTION >

## PRECAUTION

### PRECAUTIONS

#### Precautions for Removing Battery Terminal

INFOID:0000000010822771

- With the adoption of Auto ACC function, ACC power is automatically supplied by operating the intelligent key or remote keyless entry or by opening/closing the driver side door. In addition, ACC power is supplied even after the ignition switch is turned to the OFF position, i.e. ACC power is supplied for a certain fixed time.
- When disconnecting the 12V battery terminal, turn off the ACC power before disconnecting the 12V battery terminal, observing "How to disconnect 12V battery terminal" described below.

**NOTE:**

Some ECUs operate for a certain fixed time even after ignition switch is turned OFF and ignition power supply is stopped. If the battery terminal is disconnected before ECU stops, accidental DTC detection or ECU data damage may occur.

- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

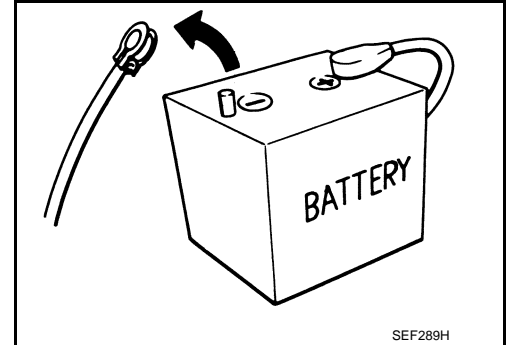
**NOTE:**

If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.

- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.

**NOTE:**

The removal of 12V battery may cause a DTC detection error.



SEF289H

#### HOW TO DISCONNECT 12V BATTERY TERMINAL

Disconnect 12V battery terminal according to Instruction 1 or Instruction 2 described below.

For vehicles parked by ignition switch OFF, refer to Instruction 2.

##### INSTRUCTION 1

1. Open the hood.
2. Turn key switch to the OFF position with the driver side door opened.
3. Get out of the vehicle and close the driver side door.
4. Wait at least 3 minutes.

**CAUTION:**

**While waiting, never operate the vehicle such as locking, opening, and closing doors. Violation of this caution results in the activation of ACC power supply according to the Auto ACC function.**

5. Remove 12V battery terminal.

**CAUTION:**

**After installing 12V battery, always check self-diagnosis results of all ECUs and erase DTC.**

##### INSTRUCTION 2 (FOR VEHICLES PARKED BY IGNITION SWITCH OFF)

1. Unlock the door with intelligent key or remote keyless entry.

**NOTE:**

At this moment, ACC power is supplied.

2. Open the driver side door.
3. Open the hood.
4. Close the driver side door.
5. Wait at least 3 minutes.

**CAUTION:**

**While waiting, never operate the vehicle such as locking, opening, and closing doors. Violation of this caution results in the activation of ACC power supply according to the Auto ACC function.**

6. Remove 12V battery terminal.

**CAUTION:**

**After installing 12V battery, always check self-diagnosis results of all ECUs and erase DTC.**

# PRECAUTIONS

< PRECAUTION >

## Precautions for Suspension

INFOID:0000000010822772

- When installing rubber bushings, the final tightening must be carried out under unladen conditions with tires on ground. Spilled oil might shorten the life of rubber bushings. Be sure to wipe off any spilled oil.
- Unladen conditions mean that fuel, engine coolant and lubricant are full. Spare tire, jack, hand tools and mats are in designated positions.
- After servicing suspension parts, be sure to check wheel alignment.
- Self-lock nuts are not reusable. Always use new ones when installing. Since new self-lock nuts are pre-oiled, tighten as they are.

A

B

C

D

RSU

F

G

H

I

J

K

L

M

N

O

P

# PREPARATION

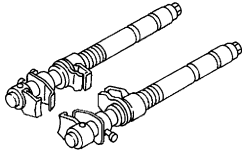
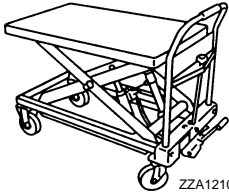
< PREPARATION >

## PREPARATION

### PREPARATION

#### Commercial Service Tools

INFOID:0000000010822773

Tool name	Description
<p>Spring compressor</p>  <p>S-NT717</p>	<p>Removing and installing coil spring</p>
<p>Manual lift table caddy</p>  <p>ZZA1210D</p>	<p>Removing and installing rear suspension member</p>

# NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

< SYMPTOM DIAGNOSIS >

## SYMPTOM DIAGNOSIS

### NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

#### NVH Troubleshooting Chart

INFOID:0000000010822774

Use chart below to find the cause of the symptom. If necessary, repair or replace these parts.

Reference																		
			RSU-9, RSU-11, RSU-13, RSU-15, RSU-17, RSU-19, RSU-20	RSU-10	—	—	—	RSU-9, RSU-11, RSU-13, RSU-15, RSU-17, RSU-19, RSU-20	RSU-7	—	NVH in DLN sections.	NVH in DLN sections.	NVH in DLN sections.	NVH in WT section.	NVH in WT section.	NVH in RAX sections.	NVH in BR section.	
Possible cause and SUSPECTED PARTS			Improper installation, looseness	Shock absorber deformation, damage or deflection	Bushing or mounting deterioration	Parts interference	Spring fatigue	Suspension looseness	Incorrect wheel alignment	Stabilizer bar fatigue	PROPELLER SHAFT	DIFFERENTIAL	REAR AXLE AND REAR SUSPENSION	TIRE	ROAD WHEEL	DRIVE SHAFT	BRAKE	
Symptom	REAR SUSPENSION	Noise	x	x	x	x	x	x			x	x	x	x	x	x	x	
		Shake	x	x	x	x		x			x		x	x	x	x	x	
		Vibration	x	x	x	x	x				x		x	x		x		
		Shimmy	x	x	x	x			x				x	x	x		x	
		Judder	x	x	x								x	x	x		x	
		Poor quality ride or handling	x	x	x	x	x		x	x			x	x	x			

x: Applicable

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P

RSU

## REAR SUSPENSION ASSEMBLY

< PERIODIC MAINTENANCE >

---

### PERIODIC MAINTENANCE

#### REAR SUSPENSION ASSEMBLY

##### Inspection

INFOID:0000000010822775

##### COMPONENT PART

Check the mounting conditions (looseness, backlash) of each component and component conditions (wear, damage) are normal.

##### SHOCK ABSORBER

Check for oil leakage and damage. Replace it if necessary.

# WHEEL ALIGNMENT

< PERIODIC MAINTENANCE >

## WHEEL ALIGNMENT

### Inspection

INFOID:0000000010822776

### DESCRIPTION

Measure wheel alignment under unladen conditions.

#### NOTE:

"Unladen conditions" means that fuel, engine coolant, and lubricant are full. Spare tire, jack, hand tools and mats are in designated positions.

### PRELIMINARY CHECK

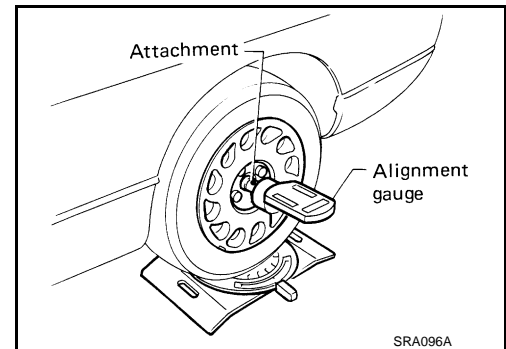
Check the following:

- Tires for improper air pressure and wear. Refer to [WT-66, "Tire Air Pressure"](#).
- Road wheels for runout.
- Wheel bearing axial end play.
  - 2WD: Refer to [RAX-6, "Inspection"](#).
  - 4WD: Refer to [RAX-16, "Inspection"](#).
- Shock absorber operation.
- Each mounting point of axle and suspension for looseness and deformation.
- Each of lower link, upper link, rear suspension member, suspension arm and shock absorber for cracks, deformation, and other damage.
- Vehicle height (posture).

### CAMBER

- Measure camber of both right and left wheels with a suitable alignment gauge.
- If camber is outside specified range, adjust with adjusting bolt in front lower link. Refer to [RSU-8, "Adjustment"](#).

**Camber:** Refer to [RSU-22, "Wheel Alignment"](#).

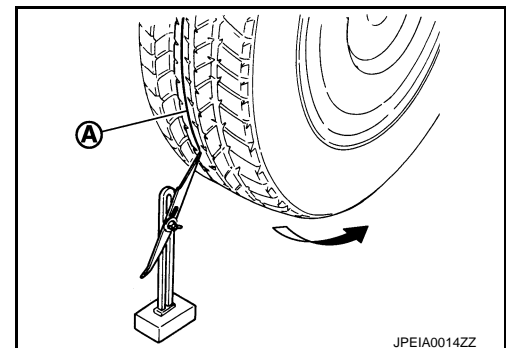


### TOE-IN

Measure toe-in by the following procedure.

#### WARNING:

- **Always perform the following procedure on a flat surface.**
  - **Make sure that no person is in front of vehicle before pushing it.**
1. Bounce the front of vehicle up and down to stabilize the vehicle height (posture).
  2. Push vehicle straight ahead about 5 m (16 ft).
  3. Put matching mark (A) on base line of the tread (rear side) of both tires at the same height of hub center. These are measuring points.



# WHEEL ALIGNMENT

## < PERIODIC MAINTENANCE >

4. Measure distance (A) (rear side).
5. Push vehicle slowly ahead to rotate wheels 180 degrees (1/2 turn).

**NOTE:**

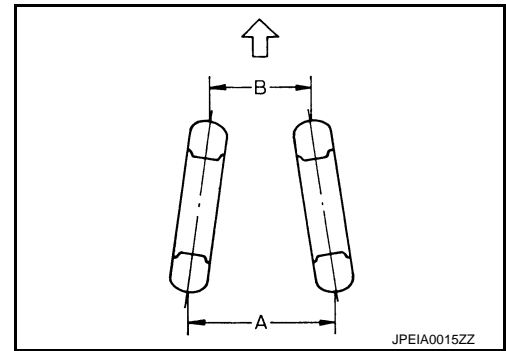
If the wheels rotate more than 180 degrees (1/2 turn), start this procedure again from the beginning. Do not push the vehicle backward.

6. Measure distance (B) (front side).

**Total toe-in = A – B**

**Total toe-in: Refer to [RSU-22, "Wheel Alignment"](#).**

- If toe-in is outside specified range, adjust with adjusting bolt in suspension arm. Refer to [RSU-8, "Adjustment"](#).



## Adjustment

INFOID:000000010822777

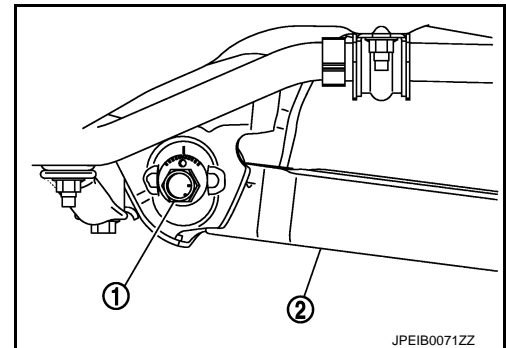
### CAMBER

- If camber exceeds the standard value, adjust with adjusting bolt ① in lower link ②.

**Camber: Refer to [RSU-22, "Wheel Alignment"](#).**

**CAUTION:**

- When tightening the nut firmly and checking the torque, use a wrench to prevent the turning of the bolt.
- After adjusting camber, be sure to check toe-in.
- If camber is not still within the specification, inspect and replace any damaged or worn suspension parts.



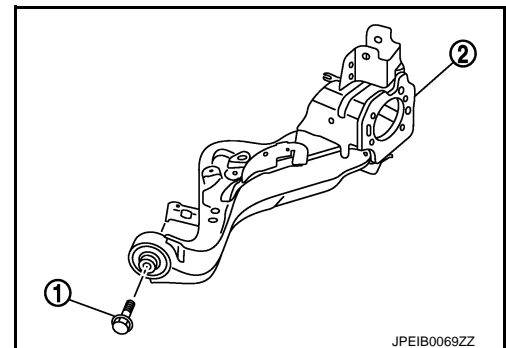
### TOE-IN

- If toe-in exceeds the standard value, adjust with adjusting bolt ① in suspension arm ②.

**Toe-In: Refer to [RSU-22, "Wheel Alignment"](#).**

**CAUTION:**

- Be sure to adjust equally on right and left side with adjusting bolt.
- When tightening the nut firmly and checking the torque, use a wrench to prevent the turning of the bolt.
- If toe-in is not still within the specification, inspect and replace any damaged or worn suspension parts.
- After toe-in adjustment, adjust neutral position of steering angle sensor. Refer to [BRC-99, "Work Procedure"](#).





# COIL SPRING

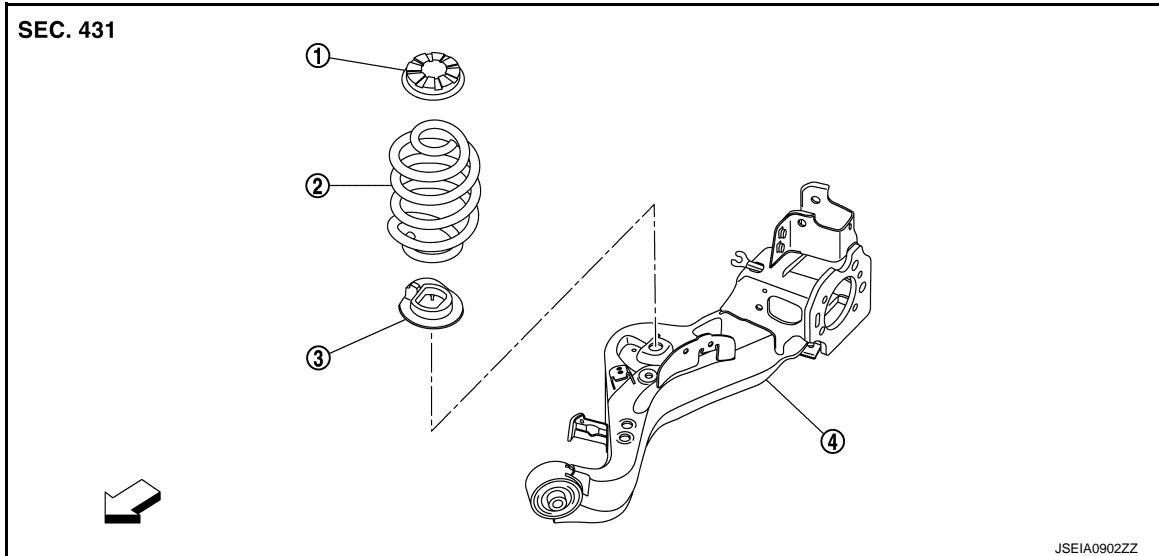
< REMOVAL AND INSTALLATION >

## REMOVAL AND INSTALLATION

### COIL SPRING

Exploded View

INFOID:0000000010822778



- ① Upper rubber seat      ② Coil spring      ③ Lower rubber seat  
④ Suspension arm  
⇐ Vehicle front

### Removal and Installation

INFOID:0000000010822779

#### REMOVAL

1. Remove tires. Refer to [WT-61, "Removal and Installation"](#).
2. Remove wheel sensor and sensor harness. Refer to [BRC-214, "REAR WHEEL SENSOR : Removal and Installation"](#).
3. Remove caliper assembly. Hang caliper assembly in a place where it will not interfere with work. Refer to [BR-63, "BRAKE CALIPER ASSEMBLY : Removal and Installation"](#).

#### CAUTION:

**Never depress brake pedal while brake caliper is removed.**

4. Using jack to suspension arm.

#### CAUTION:

- Never damage the front suspension member with a jack.
- Check the stable condition when using a jack.

5. Remove shock absorber from suspension arm. Refer to [RSU-11, "Removal and Installation"](#).
6. Remove upper link from suspension arm. Refer to [RSU-17, "Removal and Installation"](#).
7. Remove lower link from suspension arm. Refer to [RSU-15, "Removal and Installation"](#).
8. Loosen the mounting bolts and nuts of suspension arm and suspension arm bracket.
9. Remove drive shaft. [RAX-22, "Removal and Installation"](#) (4WD).
10. Slowly lower jack, remove upper rubber seat, coil spring and lower rubber seat from suspension arm.

#### CAUTION:

**Operate while checking that jack supporting status is stable.**

11. Perform inspection after removal. Refer to [RSU-10, "Inspection"](#).

#### INSTALLATION

Note the following, and install in the reverse order of removal.

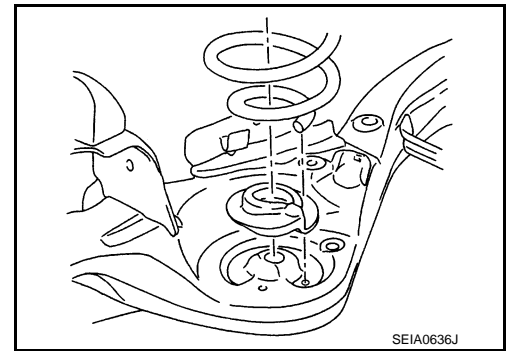
## COIL SPRING

### < REMOVAL AND INSTALLATION >

- Securely install coil spring with the lower end aligned with the steps of lower rubber seat.

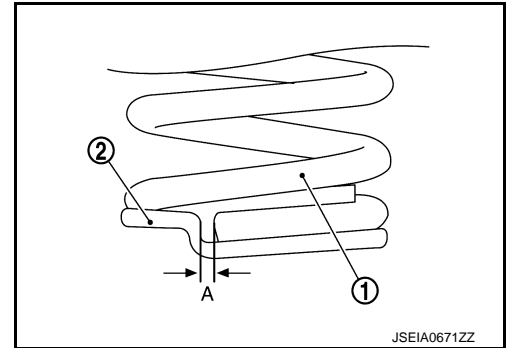
**CAUTION:**

The lower rubber seat protrusion must be securely inserted into the hole of rear suspension arm.



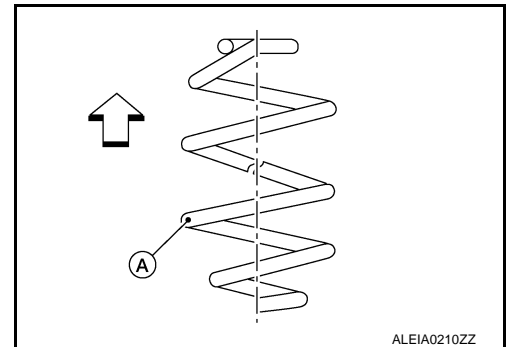
- Install coil spring ① by aligning lower end of coil spring with lower rubber seat ② as shown in the figure.

**Dimension (A) : 5 mm (0.20 in) or less**



**CAUTION:**

Set coil spring so that its paint mark ① is aligned with the position of 1.75 turns from the bottom end of the coil spring.



- Perform final tightening of fixing parts at the vehicle installation position (rubber bushing), under unladen conditions with tires on level ground.
- Perform inspection after installation. Refer to [RSU-10, "Inspection"](#).

### Inspection

INFOID:0000000010822780

#### INSPECTION AFTER REMOVAL

Check rear lower link, rubber seat, upper seat, and coil spring for deformation, crack, and damage. Replace it if necessary.

#### INSPECTION AFTER INSTALLATION

- Check wheel sensor harness for proper connector. Refer to [BRC-213, "REAR WHEEL SENSOR : Exploded View"](#).
- Check wheel alignment. Refer to [RSU-7, "Inspection"](#).
- Adjust neutral position of steering angle sensor. Refer to [BRC-99, "Work Procedure"](#).

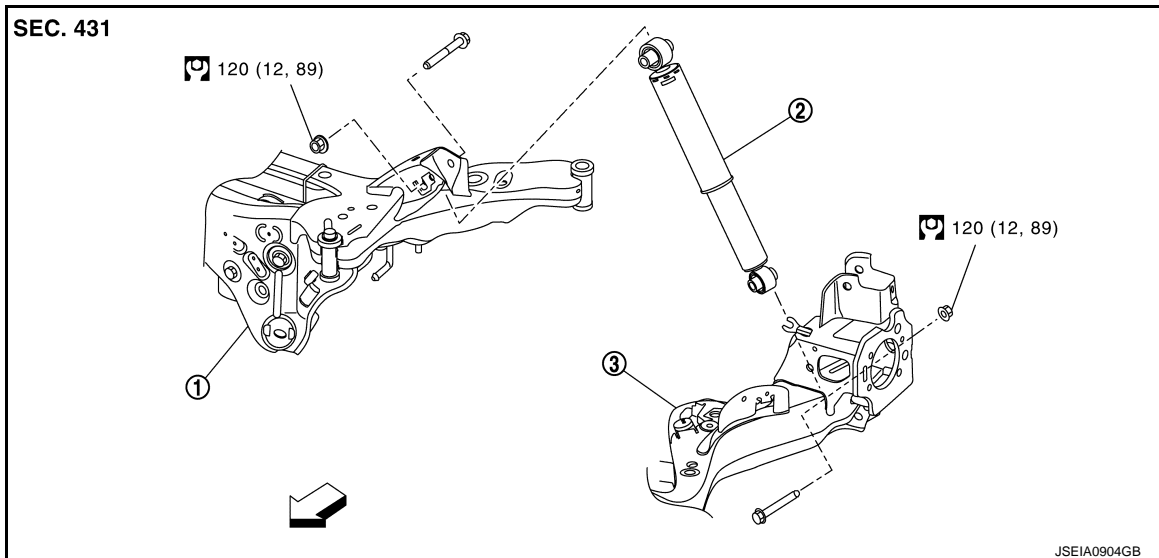
# REAR SHOCK ABSORBER

< REMOVAL AND INSTALLATION >

## REAR SHOCK ABSORBER

### Exploded View

INFOID:0000000010822781



① Rear suspension member

② shock absorber

③ Suspension arm

: N·m (kg-m, ft-lb)

: Vehicle front

### Removal and Installation

INFOID:0000000010822782

#### REMOVAL

1. Remove tires. Refer to [WT-61, "Removal and Installation"](#).
2. Set jack (A) under suspension arm to relieve the coil spring tension.  
**CAUTION:**
  - Check the stable condition when using a jack.
  - Never damage suspension arm with a jack.
3. Remove shock absorber mounting bolt (Upper and lower side).
4. Remove shock absorber.
5. Perform inspection after removal. Refer to [RSU-11, "Inspection"](#).

#### INSTALLATION

Note the following, and install in the reverse order of removal.

- Perform final tightening of fixing parts at the vehicle installation position (rubber bushing), under unladen conditions with tires on level ground.
- Perform inspection after installation. Refer to [RSU-11, "Inspection"](#).
- After replacing the shock absorber, always follow the disposal procedure to discard the shock absorber. Refer to [RSU-12, "Disposal"](#).

### Inspection

INFOID:0000000010822783

#### INSPECTION AFTER DISASSEMBLY

Check the following items, and replace the part if necessary.

- Shock absorber for deformation, cracks, and other damage.
- Piston rod for damage, uneven wear, and distortion.
- Oil leakage

#### INSPECTION AFTER INSTALLATION

1. Check wheel alignment. Refer to [RSU-7, "Inspection"](#).

## REAR SHOCK ABSORBER

### < REMOVAL AND INSTALLATION >

2. Adjust neutral position of steering angle sensor. Refer to [BRC-99. "Work Procedure"](#).

### Disposal

INFOID:000000010822784

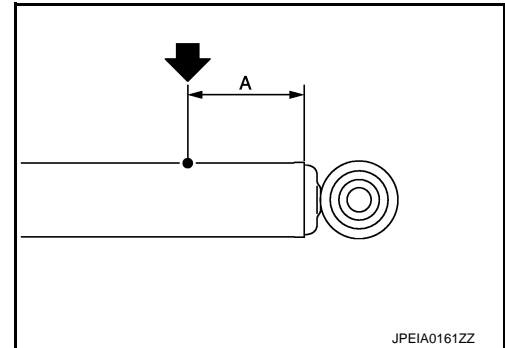
1. Set shock absorber horizontally to the ground with the piston rod fully extracted.
2. Drill 2 – 3 mm (0.08 – 0.12 in) hole at the position (●) from top as shown in the figure to release gas gradually.

#### **CAUTION:**

- Wear eye protection (safety glasses).
- Wear gloves.
- Be careful with metal chips or oil blown out by the compressed gas.

#### **NOTE:**

- Drill vertically in this direction show by arrow.
- Directly to the outer tube avoiding brackets.
- The gas is clear, colorless, odorless, and harmless.



JPEIA0161ZZ

**A : 20 – 30 mm (0.79 – 1.18 in)**

3. Position the drilled hole downward and drain oil by moving the piston rod several times.

#### **CAUTION:**

**Dispose of drained oil according to the law and local regulations.**

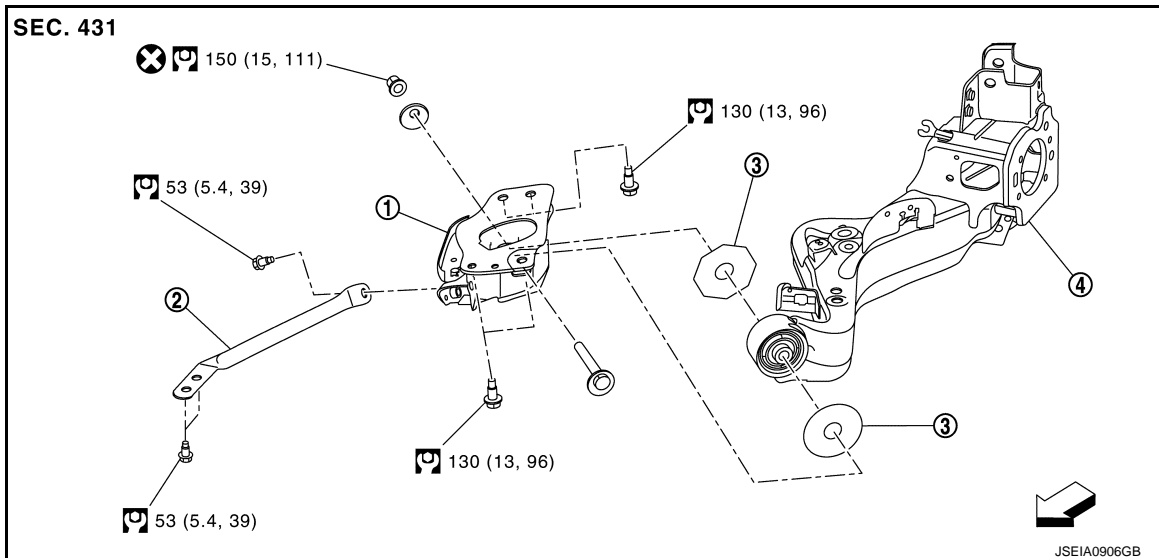
# REAR SUSPENSION ARM

< REMOVAL AND INSTALLATION >

## REAR SUSPENSION ARM

### Exploded View

INFOID:0000000010822785



- ① Suspension arm bracket      ② Suspension bar      ③ Arm stopper  
④ Suspension arm

⊗: Always replace after every disassembly.

Ⓜ: N·m (kg-m, ft-lb)

↔: Vehicle front

## Removal and Installation

INFOID:0000000010822786

### REMOVAL

1. Remove tires. Refer to [WT-61, "Removal and Installation"](#).
  2. Drain brake fluid.
    - LHD: Refer to [BR-13, "Draining"](#).
    - RHD: Refer to [BR-77, "Draining"](#).
  3. Remove wheel sensor and sensor harness. Refer to [BRC-214, "REAR WHEEL SENSOR : Removal and Installation"](#).
  4. Remove caliper assembly. Hang caliper assembly in a place where it will not interfere with work.
    - LHD: Refer to [BR-63, "BRAKE CALIPER ASSEMBLY : Removal and Installation"](#).
    - RHD: Refer to [BR-123, "BRAKE CALIPER ASSEMBLY : Removal and Installation"](#).
- CAUTION:**  
**Never depress brake pedal while brake caliper is removed.**
5. Remove disc rotor.
    - 2WD: Refer to [RAX-7, "Removal and Installation"](#).
    - 4WD: Refer to [RAX-18, "Removal and Installation"](#).
- CAUTION:**
  - Put matching marks on the wheel hub assembly and the disc rotor before removing the disc rotor.
  - Never drop disc rotor.- 6. Remove parking brake cable mounting bolt. Refer to [PB-154, "Exploded View"](#).
- 7. Separate the brake tube from the brake hose, and then remove rock plate.
  - LHD: Refer to [BR-29, "REAR : Removal and Installation"](#).
  - RHD: Refer to [BR-92, "REAR : Removal and Installation"](#).
- 8. Remove brake tube from suspension arm.
  - LHD: Refer to [BR-27, "REAR : Exploded View"](#).

## REAR SUSPENSION ARM

### < REMOVAL AND INSTALLATION >

---

- RHD: Refer to [BR-91, "REAR : Exploded View"](#).
9. Remove rear wheel hub assembly and back plate.
    - 2WD: Refer to [RAX-7, "Exploded View"](#).
    - 4WD: Refer to [RAX-18, "Exploded View"](#).
  10. Removal rear height sensor (with LED head lamp). Refer to [EXL-200, "REAR HEIGHT SENSOR : Removal and Installation"](#).
  11. Set jack suspension arm.  
**CAUTION:**
    - **Check the stable condition when using a jack.**
    - **Never damage rear lower link with a jack.**
  12. Remove coil spring from suspension arm. Refer to [RSU-9, "Removal and Installation"](#).
  13. Remove suspension arm bracket and suspension arm from vehicle.  
**CAUTION:**  
**Remove suspension arm bracket and suspension arm as a set.**
  14. Remove suspension arm bracket from suspension arm.
  15. Perform inspection after removal. Refer to [RSU-14, "Inspection"](#).

### INSTALLATION

Note the following, and install in the reverse order of removal.

- Align the matching marks that have been made during removal when reusing the disc rotor.
- After installin, perform the air bleeding. Refer to [BR-14, "Bleeding Brake System"](#).
- Perform final tightening of fixing parts at the vehicle installation position (rubber bushing), under unladen conditions with tires on level ground.
- Be careful about the direction of arm stopper. (Vehicle side: Circule, Inside: Octagon)
- Perform inspection after installation. Refer to [RSU-14, "Inspection"](#).

### Inspection

INFOID:0000000010822787

### INSPECTION AFTER REMOVAL

Check suspension arm and bushing for deformation, crack, and damage. Replace it if necessary.

### INSPECTION AFTER INSTALLATION

1. Check wheel sensor harness for proper connector. Refer to [BRC-213, "REAR WHEEL SENSOR : Exploded View"](#).
2. Check wheel alignment. Refer to [RSU-7, "Inspection"](#).
3. Adjust neutral position of steering angle sensor. Refer to [BRC-99, "Work Procedure"](#).
4. After final tightening, install rear height sensor (with LED head lamp). Refer to [EXL-200, "REAR HEIGHT SENSOR : Removal and Installation"](#).

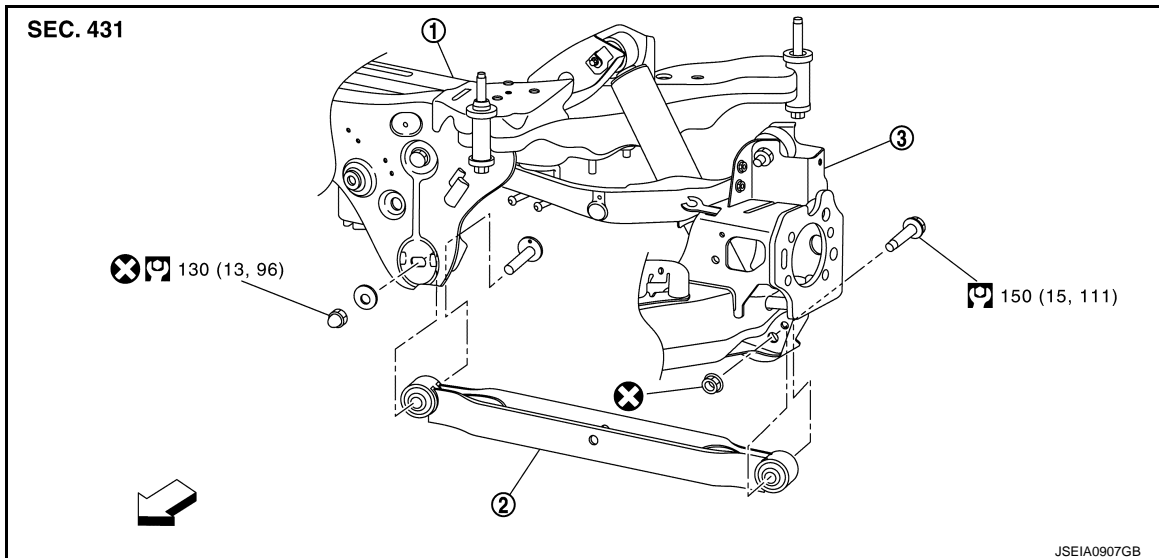
# LOWER LINK

< REMOVAL AND INSTALLATION >

## LOWER LINK

### Exploded View

INFOID:0000000010822788



① Lower link

⊗: Always replace after every disassembly.

⊞: N·m (kg-m, ft-lb)

↔: Vehicle front

## Removal and Installation

INFOID:0000000010822789

### REMOVAL

1. Remove tires. Refer to [WT-61, "Removal and Installation"](#).
2. Removal rear height sensor (with LED head lamp). Refer to [EXL-200, "REAR HEIGHT SENSOR : Removal and Installation"](#).
3. Separate stabilize link from lower link. Refer to [RSU-19, "Removal and Installation"](#).
4. Set jack suspension arm.  
**CAUTION:**
  - Check the stable condition when using a jack.
  - Never damage rear lower link with a jack.
5. Remove lower link from suspension arm.
6. Remove lower link from suspension member.
7. Perform inspection after removal. Refer to [RSU-15, "Inspection"](#).

### INSTALLATION

Note the following, and install in the reverse order of removal.

- Perform final tightening of fixing parts at the vehicle installation position (rubber bushing), under unladen conditions with tires on level ground.
- Perform inspection after installation. Refer to [RSU-15, "Inspection"](#).

### Inspection

INFOID:0000000010822790

### INSPECTION AFTER REMOVAL

Check suspension arm and bushing for deformation, crack, and damage. Replace it if necessary.

### INSPECTION AFTER INSTALLATION

1. Check wheel alignment. Refer to [RSU-7, "Inspection"](#).

## LOWER LINK

### < REMOVAL AND INSTALLATION >

---

2. Adjust neutral position of steering angle sensor. Refer to [BRC-99, "Work Procedure"](#).
3. After final tightening, install rear height sensor (with LED head lamp). Refer to [EXL-200, "REAR HEIGHT SENSOR : Removal and Installation"](#).



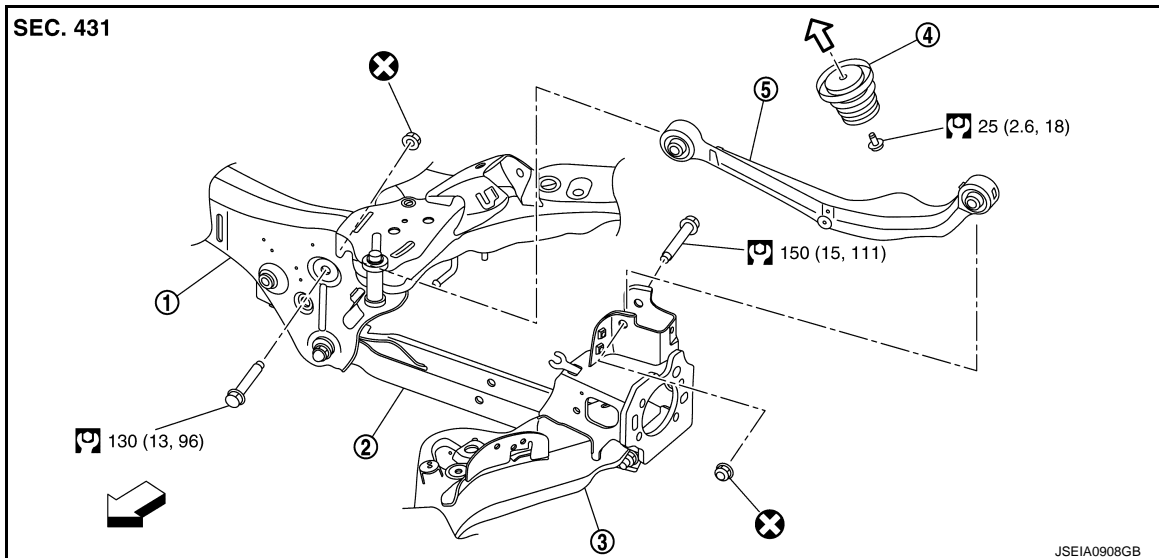
# UPPER LINK

< REMOVAL AND INSTALLATION >

## UPPER LINK

### Exploded View

INFOID:0000000010822791



- ① Rear suspension member      ② Lower link      ③ Suspension arm

- ④ Bound bumper      ⑤ Upper link

⊗: Always replace after every disassembly.

⊞: N·m (kg-m, ft-lb)

←: Vehicle front

## Removal and Installation

INFOID:0000000010822792

### REMOVAL

1. Remove tires. Refer to [WT-61, "Removal and Installation"](#).
2. Remove wheel sensor and sensor harness. Refer to [BRC-214, "REAR WHEEL SENSOR : Removal and Installation"](#).
3. Set jack suspension arm.  
**CAUTION:**
  - Check the stable condition when using a jack.
  - Never damage rear lower link with a jack.
4. Remove upper link from suspension arm.
5. Remove upper link bracket from rear suspension member.
6. Perform inspection after removal. Refer to [RSU-17, "Inspection"](#).

### INSTALLATION

Note the following, and install in the reverse order of removal.

- Align the matching marks that have been made during removal when reusing the disc rotor.
- Perform final tightening of fixing parts at the vehicle installation position (rubber bushing), under unladen conditions with tires on level ground.
- Perform inspection after installation. Refer to [RSU-17, "Inspection"](#).

## Inspection

INFOID:0000000010822793

### INSPECTION AFTER REMOVAL

Check suspension arm and bushing for deformation, crack, and damage. Replace it if necessary.

### INSPECTION AFTER INSTALLATION

## UPPER LINK

### < REMOVAL AND INSTALLATION >

---

1. Check wheel sensor harness for proper connector. Refer to [BRC-213, "REAR WHEEL SENSOR : Exploded View"](#).
2. Check wheel alignment. Refer to [RSU-7, "Inspection"](#).
3. Adjust neutral position of steering angle sensor. Refer to [BRC-99, "Work Procedure"](#).

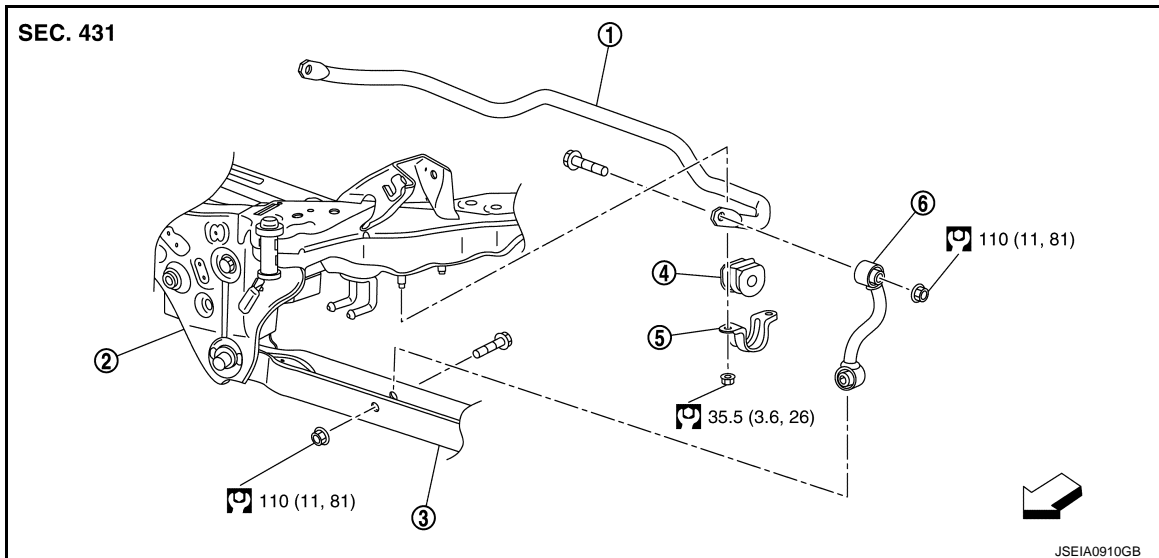
# REAR STABILIZER

< REMOVAL AND INSTALLATION >

## REAR STABILIZER

### Exploded View

INFOID:0000000010822794



- |                    |                          |                   |
|--------------------|--------------------------|-------------------|
| ① Stabilizer bar   | ② Rear suspension member | ③ Lower link      |
| ④ Stabilizer clamp | ⑤ Stabilizer bushing     | ⑥ Stabilizer link |

: N·m (kg-m, ft-lb)

: Vehicle front

### Removal and Installation

INFOID:0000000010822795

#### REMOVAL

1. Remove stabilizer link.
2. Remove main muffler.
  - MR20DD: Refer to [EX-6. "Removal and Installation"](#).
  - QR25DE: Refer to [EX-12. "Removal and Installation"](#).
  - R9M: Refer to [EX-18. "Removal and Installation"](#).
3. Remove mounting nuts on stabilizer clamp and stabilizer bar from suspension member.

#### INSTALLATION

Install in the reverse order of removal.

#### Inspection

INFOID:0000000010822796

#### INSPECTION AFTER REMOVAL

Check stabilizer bar, stabilizer link, stabilizer bushing and stabilizer clamp for deformation, cracks or damage. Replace it if necessary.

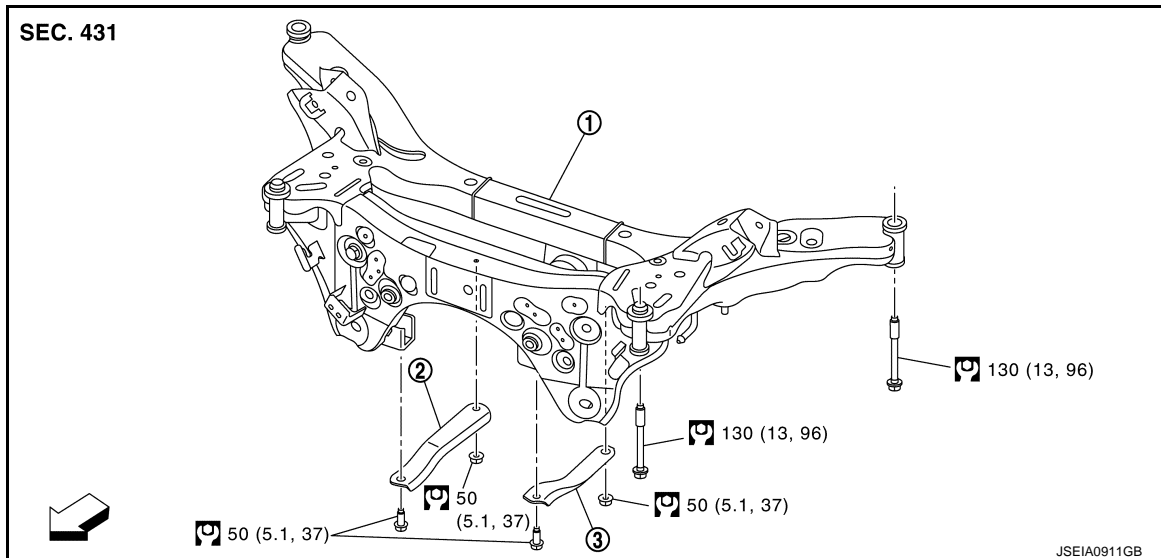
# REAR SUSPENSION MEMBER

< REMOVAL AND INSTALLATION >

## REAR SUSPENSION MEMBER

Exploded View

INFOID:0000000010822797



- ① Rear suspension member      ② Suspension member stay (right side)      ③ Suspension member stay (left side)

: N·m (kg·m, ft·lb)

: Vehicle front

## Removal and Installation

INFOID:0000000010822798

### REMOVAL

1. Remove tires. Refer to [WT-61, "Exploded View"](#)
2. Remove wheel sensor and sensor harness. Refer to [BRC-214, "REAR WHEEL SENSOR : Removal and Installation"](#).
3. Remove caliper assembly. Hang caliper assembly not to interfere with work.
  - LHD: Refer to [BR-63, "BRAKE CALIPER ASSEMBLY : Removal and Installation"](#).
  - RHD: Refer to [BR-123, "BRAKE CALIPER ASSEMBLY : Removal and Installation"](#).

**CAUTION:**  
**Never depress brake pedal while brake caliper is removed.**
4. Remove disc rotor.
  - 2WD: Refer to [RAX-7, "Removal and Installation"](#).
  - 4WD: Refer to [RAX-18, "Removal and Installation"](#).

**CAUTION:**
  - Put matching marks on the wheel hub assembly and the disc rotor before removing the disc rotor.
  - Never drop disc rotor.
5. Remove parking brake cable mounting bolt. Refer to [PB-154, "Removal and Installation"](#).
6. Removal rear hight sensor (with LED head lamp). Refer to [EXL-200, "REAR HEIGHT SENSOR : Removal and Installation"](#).
7. Remove center muffler and main muffler.
  - MR20DD: Refer to [EX-6, "Removal and Installation"](#).
  - QR25DE: Refer to [EX-12, "Removal and Installation"](#).
  - R9M: Refer to [EX-18, "Removal and Installation"](#).
8. Remove stabilizer bar and stabilizer link. Refer to [RSU-19, "Removal and Installation"](#).
9. Remove drive shaft (4WD). Refer to [RAX-22, "Removal and Installation"](#).
10. Remove propeller shaft (4WD). Refer to [DLN-214, "Removal and Installation"](#).

## REAR SUSPENSION MEMBER

### < REMOVAL AND INSTALLATION >

11. Remove rear final drive (4WD). Refer to [DLN-239, "Removal and Installation"](#).
12. Remove rear shock absorber. Refer to [RSU-13, "Removal and Installation"](#).
13. Remove coil spring. Refer to [RSU-9, "Removal and Installation"](#).
14. Set jack rear suspension member.

#### **CAUTION:**

- Check the stable condition when using a jack.
- Never damage rear lower link with a jack.

15. Remove rear suspension member mounting bolt.
16. Slowly lower jack, remove rear suspension member with lower link and upper link.

#### **CAUTION:**

**Operate while checking that jack supporting status is stable.**

17. Remove suspension member stay, lower link and upper link from suspension member.
18. Perform inspection after removal. Refer to [RSU-14, "Inspection"](#).

### INSTALLATION

Note the following, and install in the reverse order of the removal.

- Align the matching marks that have been made during removal when reusing the disc rotor.
- Perform the final tightening of each of parts under unladen conditions, which were removed when removing rear suspension assembly.
- Perform inspection after installation. Refer to [RSU-21, "Inspection"](#).

### Inspection

INFOID:0000000010822799

### INSPECTION AFTER REMOVAL

Check rear suspension member for deformation, cracks, or any other damage. Replace it if necessary.

### INSPECTION AFTER INSTALLATION

1. Check wheel sensor harness for proper connection. Refer to [BRC-213, "REAR WHEEL SENSOR : Exploded View"](#).
2. Check wheel alignment. Refer to [RSU-7, "Inspection"](#).
3. Adjust neutral position of steering angle sensor. Refer to [BRC-99, "Work Procedure"](#).
4. After final tightening, install rear height sensor (with LED head lamp). Refer to [EXL-200, "REAR HEIGHT SENSOR : Removal and Installation"](#).

## SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

## SERVICE DATA AND SPECIFICATIONS (SDS)

### SERVICE DATA AND SPECIFICATIONS (SDS)

#### Wheel Alignment

INFOID:0000000010822800

Item		Standard	
Tire size		17 inch/18 inch	19 inch
Camber Degree minute (Decimal degree)	Minimum	-1° 15' (-1.25°)	
	Nominal	-0° 30' (-0.50°)	
	Maximum	0° 15' (0.25°)	
Toe-in	Total toe-in Distance	Minimum	—
		Nominal	In 1.7 mm (In 0.067 in)      In 1.8 mm (In 0.071 in)
		Maximum	—
	Total toe-angle Degree minute (Decimal degree)	Minimum	Out 0° 15' (Out 0.25°)
		Nominal	In 0° 10' (In 0.17°)
		Maximum	In 0° 35' (In 0.58°)

Measure value under unladen\* conditions.

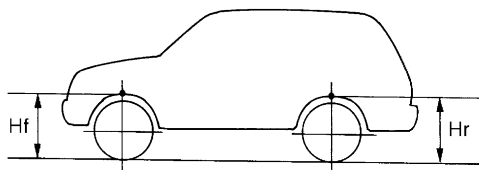
\*: Fuel, engine coolant and lubricant are full. Spare tire, jack, hand tools and mats are in designated positions.

#### Wheelarch Height

INFOID:0000000010822801

#### 2ROW

Item	Standard								
Engine	MR20DD/QR25DE				R9M				
Drive	2WD		4WD		2WD		4WD		
Tire Size	17 inch	18 inch	17 inch	18 inch	17 inch	19 inch	17 inch	18 inch	19 inch
Front (Hf)	800 mm (31.50 in)	803 mm (31.61 in)	799 mm (31.46 in)	801 mm (31.54 in)	797 mm (31.38 in)	802 mm (31.57 in)	796 mm (31.34 in)	799 mm (31.46 in)	802 mm (31.57 in)
Rear (Hr)	798 mm (31.42 in)	800 mm (31.50 in)	796 mm (31.34 in)	799 mm (31.46 in)	798 mm (31.42 in)	802 mm (31.57 in)	797 mm (31.38 in)	799 mm (31.46 in)	801 mm (31.54 in)



SFA746B

Measure value under unladen\* conditions.

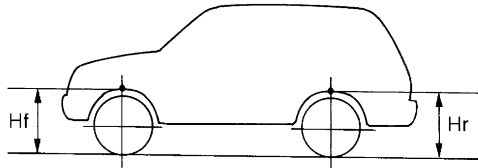
\*: Fuel, engine coolant and lubricant are full. Spare tire, jack, hand tools and mats are in designated positions.

#### 3ROW

## SERVICE DATA AND SPECIFICATIONS (SDS)

### < SERVICE DATA AND SPECIFICATIONS (SDS)

Item	Standard			
Engine	R9M			
Drive	2WD		4WD	
Tire Size	17 inch	19 inch	17 inch	19 inch
Front (Hf)	797 mm (31.38 in)	802 mm (31.57 in)	797 mm (31.38 in)	802 mm (31.57 in)
Rear (Hr)	796 mm (31.34 in)	801 mm (31.54 in)	795 mm (31.30 in)	800 mm (31.50 in)



SFA746B

Measure value under unladen\* conditions.

\*: Fuel, engine coolant and lubricant are full. Spare tire, jack, hand tools and mats are in designated positions.